



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,898	03/15/2000	Torgny Palenius	040070-922	9354

21839 7590 08/22/2003

BURNS DOANE SWECKER & MATHIS L L P  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

LEE, CHI HO A

ART UNIT	PAPER NUMBER
----------	--------------

2663

DATE MAILED: 08/22/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

2

**Office Action Summary**

Application No.

09/525,898

Applicant(s)

PALENIUS, TORGNY

Examiner

Andrew Lee

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-8, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2663

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1, 11 & 9, 10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected I, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

Since, the election on Paper No. 10 was made without any arguments. It is assumed that the election was made without traverse.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 11/01/00 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

If "at least one reserved code" is not used for transmitting signals. It is unclear how the receiver estimates interference.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2, 4, 12, 5-7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Umeda et al U.S. Patent Number 5,420,850.

Re Claim 2, fig. 1 teaches a base station transmitting a composite signal (See col. 4, lines 46-60) comprising of plurality of PN channels (a set of codes) to the mobile receiver wherein the interference level detector 24B of the mobile estimates interference of the desired channel (reserving at least one code) (See col. 5, lines 28-48).

Re Claim 4, the base station broadcasts a control channel that identifies the communication channels to the mobile (See col. 5, lines 20-28).

Re Claim 12, further teaches that the mobile stores (a memory) information about the control channels (said reserved code) of adjoining cells (See col. 9, lines 30-40).

Re Claim 5, fig. 1 teaches the mobile 20 comprising a receiver 21 and Correlation Detector 22 collectively for receiving and despreading the spreaded signals (at least one channelization code) from the base station; PN code generating part 23 (a reserved code) are read out under control by by Cont 25 (a processor) that is used by interference detector 24B for estimating interference (See col. 6, lines 26-41).

Re Claim 6, refer to Claims 4 and 5, wherein the control channel identifies control channel information (said reserved code) that is used by the Cont 25 in a control

Art Unit: 2663

channel receiving level measuring mode. Furthermore, fig. 1 is implemented using CDMA air interface.

Re Claim 7, refer to Claim 4, wherein the control channel includes traffic channels CH1~CHm.

Re Claim 13, refer to Claim 12.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al U.S. Patent Number 5,420,850 in view of Kato et al U.S. Patent Number 5,583,851.

Re Claim 8, Umeda et al teaches how the mobile compares the respective spreading codes between cells to determine the one cell in which the mobile station is currently located based on the spreading code corresponding to the comparison signal having the highest level of signal quality. Afterworth, communication between the mobile and radio-communication system can be made by the mobile.

Umeda et al fails to explicitly teaches "said code associated with said traffic channel is selected based upon a desired user bit rate for a connection ..".

Kato et al teaches a mobile unit which can transmit information at a high-bit rate by allocating a plurality of channel numbers to a user who requires a high-bit rate communication (See col. 4, lines 20-46 & col. 5, lines 23-46). The control channel in

Art Unit: 2663

Umeda et al provide information regarding the traffic channels that are used to transmit information to respective mobile stations from the base station. This would suggest that information regarding idle channels is available to the mobile station. As disclosed by Kato et al, plurality of channels/codes are allocated to user based on the required/desired high-bit rate. One skilled in the art would have been motivated by Kato et al to select traffic channels based on the desired user bit rate to improve throughput.

Therefore, it would have been obvious to one ordinary skilled to incorporate the teaching of Kato et al into the teaching of Umeda et al.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent Number 5428818 teaches reducing interference in a radio link;

U.S. Patent Number 5784406 teaches loopback testing;

U.S. Patent Number 6006073 teaches automatic interference analysis;

U.S. Patent Number 6118767 teaches interference control in CDMA;

U.S. Patent Number 6137991 teaches estimating downlink interference;

U.S. Patent Number 6490266 teaches test call in CDMA;

U.S. Patent Number 6542484 teaches code allocation radio system.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Lee whose telephone number is 703-305-1500. The examiner can normally be reached on Monday to Friday from 8:30AM to 6:00PM.

Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



AI

August 18, 2003